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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,097	05/18/2007	Cliff Aaby	268318US28PCT	6740
88095	7590	05/24/2010		
ARRIS 3871 Lakefield Drive Suwanee, GA 30024			EXAMINER CHOKSHI, PINKAL R	
			ART UNIT 2425	PAPER NUMBER
			NOTIFICATION DATE 05/24/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mirho@fspllc.com

Office Action Summary	Application No. 10/579,097	Applicant(s) AABY ET AL.	
	Examiner Pinkal R. Chokshi	Art Unit 2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 and 11-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 04/26/2010 have been fully considered but they are not persuasive. Applicant asserts that combination of Jerding and Hamilton does not describe composing service group identifier at a service node into an AV stream format, and communicating the service group identifier to a STB. Examiner respectfully disagrees. The well-known concept of "Service Group Identifier" in broadcast network is to predict which content/channel is common for all STBs verses only to a particular group of STBs. Jerding discloses (§0039) that the MPEG-2 content is received at the service group of QAM modulators which comprises service group number. Jerding further discloses that DNCS uses the service group number to determine which modulator has access to a particular digital home communication terminal (DHCT), where service group inserts other data and information into the stream and transmits it to DHCT. As Hamilton discloses (§0023) that the customers receive the spectrum of multiple channels, where some channels are common and others are unique to a particular node as represented in Fig. 1. Hamilton further discloses that the hub creates the unique spectrum by inserting channels that are unique to a node; this assembled spectrum containing a plurality of broadcast channels that is transmitted to all customers and plurality of unique channels that is transmitted to customers at a specific node. Hamilton also discloses (§0056) that each node has the unique identifier that is associated with the hub as represented in Fig. 3 (element 306). Therefore, the

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combination of references Jerding and Hamilton renders obviousness and the rejection is maintained.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

With regard to the dependent claims, the respective rejections are maintained as Applicant has only argued that the secondary reference does not cure the deficiencies of Jerding and Hamilton, nevertheless it is the Examiner's contention that combination of Jerding and Hamilton does not contain any deficiencies. See the rejection below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. **Claims 6, 7, and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over US PG Pub 2006/0271973 to Jerding et al (hereafter referenced as Jerding) in view of US PG Pub 2003/0139980 to Hamilton (hereafter referenced as Hamilton).

Regarding **claim 6**, “a content on demand system” reads on the video on-demand system (title and ¶0002) disclosed by Jerding and represented in Fig. 2.

As to “system comprising: a content on demand server system comprising logic to compose set top box configuration information into an audio and/or video stream format, and logic to communicate the configuration information to a plurality of service nodes” Jerding discloses (¶0036) that the DNCS insert broadcast file system (BFS) data into an MPEG-2 transport stream. Jerding further discloses (¶0039) that the VOD content server and manager delivers MPEG-2 content to service group modulators as represented in Fig. 2.

As to “a plurality of service nodes each comprising logic to compose a service group identifier into the audio and/or video stream format, and logic to communicate the configuration information and the service group identifier to a plurality of set top boxes” Jerding discloses (¶0039) that the MPEG-2 content is received at the service group of QAM modulators which comprises service group number. Jerding further discloses that DNCS uses the service group number to determine which modulator has access to a particular digital home communication terminal (DHCT), where service group inserts other data and information into the stream and transmits it to DHCT.

Jerding meets all the limitations of the claim except “service node composes a service group identifier into the audio/video stream format, and communicates the service group identifier to a plurality of set top boxes.” However, Hamilton discloses (§0023) that the hub (service node) receives the broadcast channels for all the nodes, where the spectrum for unique narrowcast channel (service group identifier) is inserted into a specific broadcast channel for the node. Hamilton also discloses that the head-end assembles the spectrum containing a plurality of broadcast channels to be received by all STBs, and hub inserts narrowcast channels to be received by customer at specific node. Hamilton further discloses (§0024) that the only specific customers of the node can access the narrowcast channels received from the hub as represented in Figs. 1 and 2. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Jerding’s system by inserting the service group identifier into the stream as taught by Hamilton in order to allow provision of pay per view programming and content on-demand (§0004).

Regarding **claim 7**, “the content on demand system wherein the set top box configuration information further comprises: general configuration information, and configuration information for one or more groups of set top boxes” Jerding discloses (§0050) that the server provides configuration and service data, such as the catalog of titles available for rental by the user, to DHCT as represented in Fig. 3. Jerding further discloses (§0053) that the

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configuration information is transmitted to a group of DHCTs as represented in Fig. 4B.

Regarding **claim 10**, “the content on demand system further comprising: logic to receive from a set top box a request for an audio and/or video stream, the request comprising the service group identifier communicated to the set top box and an identifier of a title of the audio and/or video stream, and to provide the audio and/or video stream to a service node corresponding to the service group identifier” Jerding discloses (§0056) that the DNCS receives a request, where a user of DHCT selects a title to rent/purchase. Jerding further discloses (§0061) that the receiver uses association tags to determine the stream, where the resource descriptor identifies the QAM modulator in service group that is transmitting a service. Jerding further discloses (§0039) that the MPEG-2 stream transmitted to service group which identifies a particular DHCT.

Jerding meets all the limitations of the claim except “the request received from a STB comprises the service group identifier communicated to the STB and an identifier of a title of the audio/video stream, and to provide the audio/video stream to a service node corresponding to the service group identifier.”

However, Hamilton discloses (§0011, §0048) that when the content is ordered by the user, information about the ordered content such as identifying the network resource used to deliver the content and content title are used. Hamilton further discloses (§0024) that the ordered content is received and viewed by specific

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customers of a node. In addition, same motivation is used as rejection to claim 6.

4. **Claims 8 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jerding in view of Hamilton as applied to claim 6 above, and further in view of US PG Pub 2007/0130583 to Thiagarajan et al (hereafter referenced as Thiagarajan).

Regarding **claim 8**, “the content on demand system wherein the logic to compose set top box configuration information into an audio and/or video stream format further comprises: logic to compose set top box configuration information expressed in extensible markup language into the audio and/or video stream format” Jerding discloses (§0039) that the modulators insert information into the stream. However, combination Jerding and Hamilton does not explicitly teach that configuration information is in extensible markup language. Thiagarajan discloses (§0071 and §0075) that the content structure and other information are implemented as XML file and added with media content. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Jerding and Hamilton’s systems by using XML language for information added to the stream as taught by Thiagarajan in order to provide a basic syntax which can be used to share information between different kinds of devices.

Regarding **claim 9**, “the content on demand system wherein the set top box configuration information further comprises: general configuration

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information, and configuration information for one or more groups of set top boxes” Jerding discloses (§0050) that the server provides configuration and service data, such as the catalog of titles available for rental by the user, to DHCT as represented in Fig. 3. Jerding further discloses (§0053) that the configuration information is transmitted to a group of DHCTs as represented in Fig. 4B.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pinkal R. Chokshi whose telephone number is (571) 270-3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm (Alt. Monday off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pinkal R. Chokshi/
Examiner, Art Unit 2425

/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2425